WARDLAW + HARTRIDGE

UPPER SCHOOL CURRICULUM GUIDE

The Wardlaw+Hartridge School

Curriculum Guide
Grades 9-12

2026-2027

Mission Statement

The Wardlaw+Hartridge School prepares students to lead and succeed in a world of global interconnections. We provide an educational atmosphere characterized by academic challenge, rigorous inquiry, support for individual excellence, diversity, and a familial sense of community.

Core Values

The core values of the Wardlaw+Hartridge school community are:

- Integrity – our bedrock value, *sine qua non*

- Opportunity – Wardlaw+Hartridge develops academic and intellectual excellence in its students through programs that stretch their creative imaginations, develop their athletic and artistic skills, engage their sense of discovery, and develop a social conscience. In the process, students take on leadership roles and learn how to work effectively in teams.

- Support – Every member of the Wardlaw+Hartridge faculty believes in a personal approach to educating and developing the whole child. Wardlaw+Hartridge educators take the time, care, and interest in each student to call forth his or her best work.

- Diversity – The diversity of thought, background, and culture at Wardlaw+Hartridge distinguishes us among independent schools, strengthens the global orientation of our curriculum, and enriches the daily experience of every member of the school community, inside and outside the classroom.

- Community – When faculty members, students, parents, or graduates walk through the doors of Wardlaw+Hartridge, they have entered a home. Our community is distinguished by an ethos of care and mutual respect, and a strong partnership with families.

- Sustainability – Wardlaw+Hartridge prepares students to become citizens whose beliefs and actions will create a more humane and sustainable global society.

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Academic Overview

The Wardlaw+Hartridge Upper School provides the final stage in preparing students to succeed in demanding college programs. At the same time, the Upper School goes beyond a narrow concept of "college preparation" and educates students in the broadest sense of that term. Its aim is that students will possess the qualities –intellectual, aesthetic, social, and moral– that are necessary for an individual to achieve his or her potential in today's global society.

The Upper School provides a wide selection of college preparatory courses, including Honors and Advanced Placement (AP) courses. All classes are taught by knowledgeable and caring faculty and are designed to elicit the best work that students, with their varying abilities, can achieve. Encouraging students to wrestle with complexity, extend their understanding of nuance, and refine their sense of self is at the core of the Upper School's commitment to intellectual excellence.

The Upper School affirms not only intellectual excellence, but also excellence in the arts. The majority of its students are active participants in the visual and performing arts as members of the band, concert choir, drama productions, art classes, etc. Involvement in the arts provides the basis for life-long avenues of self-expression.

Wireless technology is an integral part of the Upper School curriculum. Students are required to own a personal laptop computer. Using technology expands the opportunity for students to ask probing questions, research those questions, and present the results. Throughout its curriculum, Wardlaw+Hartridge endeavors to instill in each of its students the discipline and standards to be ethical and productive members of the digital world in which they are participants.

The Upper School curriculum offers a variety of required and elective subjects leading to the Wardlaw+Hartridge diploma. The academic program for grades nine through twelve requires all students to accumulate at least 16.5 credits each year. This selection of courses must focus primarily on fulfilling the requirements in English, mathematics, science, social studies, world languages, the arts, physical education, and health.

A full course load is usually six classes. Students are permitted to request more than six courses. Approval depends upon the student's current and prior academic performance, the rules governing Honors and Advanced Placement courses, and the ability to schedule the requests. Students will be informed by mid-June of the faculty decision on their requests.

Schedules will be made for students that have resubmitted their enrollment contracts for the following year. For students newly enrolled: Official Final transcripts and placement tests in math and language are required prior to a schedule being made. Official Final transcript must be sent directly to our school. Students will be scheduled to take placement tests in July and August. Beginning summer 2026, students transferring into 9th grade, can take a placement test in Biology. A student wishing to enroll in Biology Honors, must have an average of 95 in their 8th grade science class and successfully pass the placement test. A student does not need to take a placement test if they do not have a 95 average in their 8th grade science course or do not wish to be placed into Biology Honors.

In all that it does, the Upper School seeks to promote the moral growth of its students by maintaining an environment in which the qualities of kindness, civility, integrity, and respect

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not only are encouraged, but also are put into practice each day.

Required Credits for Graduation

To graduate from the Wardlaw+Hartridge Upper School, a student must accumulate a minimum of sixty-six credits, at least 16.5 each academic year. The sixty-six credits must include four years of English, three years of mathematics, three years of science, three years of history, three consecutive years of world language, **three credits of Visual or Performing Arts, four credits of health, and four years of physical education. Additional credits to reach or go beyond the required sixty-six may be selected from any of the remaining course offerings.

In addition, at least four of the six courses each year must be core courses. Core courses are all courses that are required and fulfill the English, Mathematics, Science, History, and World Language Department requirements. Classes such as Advanced Art, AP Studio Art, AP Computer Science, and AP Music Theory are considered electives.

Subject Credit Requirements

Subject	Credits Required	Additional Note
Mathematics*	9.0	Algebra I, Geometry, and Algebra II required
Science*	9.0	Biology, Chemistry, and Physics required
English	12.0	3 credits required each year
History*	9.0	**Global Humanities, Modern World History, and US History required
World Language*	9.0	3 consecutive Upper School years required
The Arts**	3.0	3 credits in the Visual or Performing Arts required
Health	4.0	A total of 4 trimesters required
Physical Education	4.0	1 credit each year required
Electives	9.0	9 trimesters or 3 year-long courses required

* Highly selective colleges often recommend four years of core academic courses, or at least five major academic courses each year, with perhaps a doubling-up in an area of particular interest in substitution for one of the core areas.

** This applies to the Class of 2030 or any sophomore or juniors students who transfer beginning with the 2026/27 academic year.

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Advanced Placement Courses

Students who meet the necessary course requirements (please see the individual AP courses for these requirements) and receive a Departmental recommendation may enroll in Advanced Placement courses. The two exceptions are AP Human Geography and AP Psychology where only a Departmental recommendation is required.

The following criteria are used to facilitate this placement:

Students may request to take up to three Advanced Placement courses within the 16.5 credits required per year without administrative approval. Students wishing to enroll in additional courses (both AP and non-AP) must do so in writing and receive administrative approval (Head of Upper School, Department Chair, and a member of the College Counseling team). Requests must be submitted in writing to the Scheduling/Registrar office. All schedules must be approved by the Upper School and College Counseling.

All students taking Advanced Placement courses must follow departmental policy regarding sitting for the AP examination requirement in those courses. Students who do not adhere to the AP examination policies set forth by the respective academic department will have the "AP" designation removed from their transcript (replaced with "Advanced"). For Seniors, such transcript changes will need to be reported directly to the college/university where they have decided to enroll.

Advanced Placement Subject Self-Study

On occasion, students may be approved to self study an AP subject that we do not teach at the Wardlaw+Hartridge School. Students who wish to self-study an AP course are required to complete the AP Self-Study Google form, describing the reason for selecting the course and detailed plan of how they will be learning the material. This form will be made available on the first day of classes. Forms must be completed by Sept. 30.

Applications are reviewed by the Head of Upper School and the College Counseling Office, taking into account the student's current academic course load and whether or not the subject testing date conflicts with already scheduled AP exams and proctor availability. Students will be notified by Oct. 15.

Students should be aware that if they do not follow our AP Self Study guidelines and instructions, they will likely be compromising their subsequent course schedules. Students that have sat for an AP exam in a course offered at Wardlaw+Hartridge are not eligible to enroll in the same course the following years.

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The Wardlaw+Hartridge Global Scholars Program

**** Please note that the requirements for the Classes of 2028 and 2029 are different from those for the Class of 2027***

The Wardlaw+Hartridge Global Scholars Program (GSP) is designed for students who are interested in enhancing their overall experience in The Wardlaw+Hartridge Upper School by learning about current international challenges while demonstrating positive dispositions toward global stewardship. Students can elect to enroll in this program at the end of the ninth grade*. Students will earn an endorsement on their Wardlaw+Hartridge diploma after successful completion of requirements.
****Students must enroll in the program by the beginning of Trimester 2 of 10th grade.**

Global Scholars will demonstrate the following global competencies in a student curated digital portfolio:

- Take action for social and global change.
- Communicate ideas across differences with respect.
- Engage with empathy by developing knowledge of the world with an open mind.
- Develop an understanding of the world through research and self-reflection.

Overview of Program Requirements

Program Admittance: Students will be given an orientation during 9th Grade Foundations in the Spring. At that time, interested students will be provided with an application. Students who complete the application by the specified deadline will have their application reviewed. **All interested students need to have a 93% GPA overall at the end of their 9th grade year as part of their application for admission to the program.**

Student Digital Portfolio: Each candidate will be responsible for curating a well maintained digital portfolio in the form of a shared Google slides presentation. The portfolio will be divided into the 4 competencies, and students will demonstrate their GSP engagement and experiences through self-reflection, photographs, and other elements of their choice. Portfolios will be reviewed by the Director of The Global Scholars Program once each trimester. This review will take place during a one-on-one meeting with the Director where the candidate will discuss their reflections. A student portfolio "showcase" will take place during the Spring of their Senior year.

***World Language Competency*:** World language competency will be demonstrated by being enrolled in the same world language for all four years as a student in Upper School. **The student must maintain a language GPA of 90%.** An international student from a

country where English is not the official language may use the study of English to fulfill this requirement.

***Classes of 2028 and 2029 must maintain a language GPA of 93%**

***Specialized Global Course Work and Academic Standing*:** A Wardlaw+Hartridge Global Scholar **must also earn a final grade of 90%** in two required program specific courses.
Global Citizenship - Jr. Year Independent Study (1 credit)

AP Human Geography (3 credits, which can be taken in grades 10-12)
***Classes of 2028 and 2029 must earn a final grade of 93%**

All GSP students must maintain an overall GPA of 90%. Students who do not meet any of the GPA requirements will be counseled out of the GSP at that time.

***Classes of 2028 and 2029 must maintain an overall GPA of at least 93%**
Students who do not meet any of the GPA requirements will be counseled out of the GSP at that time.

Cross-cultural Experience: Students will engage in a cross-cultural experience as approved by the Director of Global Scholars. This can take place locally, through one of our school travel programs, as part of a virtual series or exchange, or through an independent experience upon approval.

***Community Engagement*:** Global Scholars will provide unpaid service that benefits our local communities specifically by doing work as volunteers for government or non-profit organizations. Service learning is service completed through participation in an activity that supports or enhances the work of local or international agencies to effect positive change. Each candidate is required to complete at least one service learning activity during their time in the program.
Qualifying service activities will be reviewed and approved by the Director of Global Scholars. Each year, students are required to meet an established minimum number of hours, with at least 50% of the hours taking place off campus.

Service Requirements by Grade Level:
10th Grade - 20 hours
11th and 12th Grades - 40 hours each year
Students must complete the required online form to account for the hours served.

**Service hours may begin starting with the summer prior to the new school year (a "service year" runs from after graduation in June to graduation day the following June)

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***Classes of 2028 and 2029**
10th Grade - 20 hours
11th Grade - 40 hours
12th Grade - 40 hours

***Senior Research Seminar: Capstone*:** Global Scholars will conduct original scholarly research on an issue of global relevance. Student projects will include the collection of original data. Students' work will culminate in a formal written research paper of publishable quality and a formal research presentation.
A final grade of 90% or higher must be earned.
***Classes of 2028 and 2029 must earn a final grade of GPA of 93%**

***SENIOR CANDIDATES must complete all requirements by MAY 1st of their Senior year.**

GSP Candidates are expected to attend ALL special events, such as guest speakers and special trips.

Each GSP Candidate will be evaluated by the Director of Global Scholars through one on one meetings three times each year. Student enrollment in GSP is subject to the discretion of the Director of Global Scholars at any time throughout a student's time in Upper School. Students who miss meetings, do not attend required activities, do not maintain their academic standing, and do not complete service hours will be removed from the program.

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The Wardlaw+Hartridge Dalal Entrepreneurship and Technology Program (DETP)

The Wardlaw+Hartridge Dalal Entrepreneurship and Technology Program (DETP) was launched in the 2024-2025 school year. The program is being phased in and expanded over the next several years.

The DETP combines entrepreneurship with technology, focusing on the development of innovative tools, products, or processes developed to create new business opportunities, solve specific problems, and improve existing systems within various industries. It is designed for students who are keenly interested in the intersection of STEM and business. Students in the DETP will engage in a comprehensive curriculum that bridges the gap between technical knowledge and business acumen, providing them with both the theoretical foundations and practical experience needed to succeed in the tech-driven global economy. DETP courses will encourage students to leverage emerging technologies to create scalable solutions for pressing issues facing our society.

The objectives of the DETP are to:

1. Equip students with core competencies in technology and entrepreneurship.
2. Foster an entrepreneurial mindset and problem-solving skills.
3. Provide hands-on experience in launching tech-driven startups.
4. Build leadership, teamwork and communication skills.

Students are eligible to enroll in this program at the end of ninth grade. Upon successful completion of the DETP, students will earn an endorsement on their Wardlaw+Hartridge diploma.

Requirements:

- Minimum GPA 93
- Completion of Algebra I
- Completion of a lab science course
- Formal application and interview

The following courses are designated to meet DETP requirements for the 2026-2027 school year.

COURSE TITLE	DEPARTMENT
Advanced Research in Genetics	W+H Science
Arts Entrepreneurship	GOA Fine Art
Biochem, Medicine, Drugs, & Addiction	GOA Science
Bioethics	GOA Science

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Business Problem Solving	GOA Math
Capitalism: Past, Present, Future	GOA History
AP Computer Science	W+H Computer Science and Technology
Computer Science: Analyzing Data Python	GOA Computer Science and Technology
Computer Science II: Game Design Dev.	GOA Computer Science and Technology
Computer Science III: JAVA	GOA Computer Science and Technology
Cybersecurity	GOA Computer Science and Technology
Data Visualization	GOA Computer Science and Technology
Engineering Design & Prototyping	W+H Required 10th Grade Trimester Elective
Engineering Your World	W+H Science
Entrepreneurship in a Global Context	GOA History
Entrepreneurship and Venture Thinking	W+H Required 10th Grade Trimester Elective
AP Environmental Science	W+H Science
Graphic Design	GOA Art
Honors Research in Genetics	W+H Science
International Relations	GOA History
Introduction to Artificial Intelligence	GOA Science
Introduction to Blockchain and Crypto	GOA Science
Introduction to Branding and Marketing	GOAHistory
Investing I	GOA Math
Investing II	GOA Math
Linear Algebra	GOA Math
AP Macroeconomics	W+H Math
AP Microeconomics	W+H Math
Medical Problem Solving I	GOA Science
Medical Problem Solving II	GOA Science
Molecular Biology - Technology and Bioethics	W+H Science

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Multivariable and Differential Equations	GOA Math
Number Theory	GOA Math
Personal Finance	GOA Math
PharmaVentures	W+H Science
AP Physics	W+H Science
Robotics	W+H Science
AP Statistics	W+H Math
Technology and AI Awareness	W+H Required 10th Grade Trimester Elective

The Wardlaw+Hartridge Capstone Program

Capstone Research Seminar **(3 credits)**

Open to students in 12th grade ONLY

(Prerequisites: Grade 12, Global Scholar or special departmental approval, and summer proposal assignment completed before the first day of the academic year)

The senior Capstone Research Seminar sharpens and integrates select seniors' research, writing, analysis, presentation, and project management skills in preparation for college. Each student designs and executes an original university-level research project that demonstrates commitment to the common good. Their yearlong project identifies and defines a real life problem of global significance; analyzes the problem in depth from a variety of perspectives; and proposes and justifies a course of action to address the problem. Finished projects are presented to the school community in May and published as senior theses in the *Capstone Research Journal*.

This course is a requirement of the Global Scholars Program.

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The Wardlaw+Hartridge Conservatory Program

***** Please note that the requirements listed within the tables below are for the Class of 2030.***

The Wardlaw+Hartridge Conservatory Program is designed for students who are dedicated to acquiring the knowledge and skills they will need to lead and succeed in the performing arts in college and in professional settings. The application process must be completed and approved by the first day of the second trimester of the year the student begins the program. Students who successfully complete the requirements of this program will earn an endorsement on their Wardlaw+Hartridge diploma.

Overview of Requirements

Program Admittance: Students must select which track they would like to apply for and sign up for the required classes (see below) in PCR during their course selection. They will then sit for an interview with the Performing Arts Department faculty to discuss a specific plan of requirements that will be documented in a contract that the student, parent/guardian and faculty will sign. Once the plan has been set, the student must meet all of the required expectations in a timely fashion and be in good academic standing in all W+H Conservatory courses for the duration of the program. Freshmen may wait to join the program as sophomores, but if students were enrolled at W+H as freshmen, they will not be permitted to join after their sophomore year. **Students must maintain a GPA of 93% or higher in all W+H Conservatory courses to remain in the program.**

There are two tracks students may choose from: Performance Track and Production Track. ***Please note that courses that are in italics will not be offered during the 2026-27 school year.***

PERFORMANCE TRACK

When	Freshman	Sophomore	Junior	Senior
During School	Band or Choir	Band or Choir	Band or Choir	Band or Choir
During School	(Fundamentals if schedule allows)	Fundamentals of Music Theory (possible in 26/27)	AP Music Theory	*College Audition Preparation & Piano Lab*
After School	One Hour Weekly Instrument/Voice Private Lessons	One Hour Weekly Instrument/Voice Private Lessons	One Hour Weekly Instrument/Voice Private Lessons	One Hour Weekly Instrument/Voice Private Lessons
After School	W+H MUSICAL PRODUCTION/ W+H CHAMBER MUSIC	W+H MUSICAL PRODUCTION/ W+H CHAMBER MUSIC	W+H MUSICAL PRODUCTION/ W+H CHAMBER MUSIC	W+H MUSICAL PRODUCTION/ W+H CHAMBER MUSIC

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After School	**Competition/ Festival**	**Competition/ Festival**	**Competition/ Festival**	**Competition/ Festival**
After School	**Group Recital Participation**	**Group Recital Participation**	**Junior Recital**	**Senior Recital**

Students who select the Performance Track will be expected to participate in either Band or Choir and must be members of the respective select ensembles, Jazz Band or MadJazz, every year that they are in the program. Over a three-year period, students will also be required to take two levels of Music Theory and the College Audition Preparation and Piano Lab course. Students will not likely be allowed to take Music Theory courses outside of W+H as our program is very rigorous.

All voice students must participate in the Upper School musical and instrumentalists must commit to playing in a chamber ensemble or, if approved, play in the pit for the musical. N.B., any chamber music ensembles that are formed will perform in a recital program.

Weekly one hour private music lessons on the student's principal instrument will be mandatory for all students in the program. In addition to working on skill development in private lessons, students will be required to audition for CJMEA, NJMEA, NATS or equivalent honor ensembles. In freshman and sophomore years, students will be required to perform one selection in both the winter and spring recitals. In junior and senior years, students will be required to perform 35 minutes of repertoire at a recital. (Vocalists will need to be memorized for these events.)

PRODUCTION TRACK

When	Freshman	Sophomore	Junior	Senior
During School	**Technical Theatre Practicum ***	**Technical Theatre Practicum ***	**Technical Theatre Practicum ***	**Technical Theatre Practicum ***
During School		***Advanced Audio Production***	***Studio Recording***	**Technical Film Production**
During School	**PAC Support**	**PAC Support**	**PAC Support**	**PAC Support**
After School	**W+H PLAY/MUSICAL PRODUCTION**	**W+H PLAY/MUSICAL PRODUCTION**	**W+H PLAY/MUSICAL PRODUCTION**	**W+H PLAY/MUSICAL PRODUCTION**
After School	**Group Recital Support**	**Group Recital Support**	**Junior Recital Support**	**Senior Recital Support**
After School	**School Concerts**	**School Concerts**	**School Concerts**	**School Concerts**

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Students who select the Production Track must take Technical Theatre Practicum every year that they are in the program. Through this course, students will learn the basics of lighting, sound, video production, stage management and producing. ***** *For the 2026-27 school year, students will take this course as an independent study and must complete at least 120 hours of specified service in PAC-related activities to satisfy this requirement.* Over a three-year period, students will also be required to take Advanced Audio Production, Studio Recording and Technical Film Production courses.

All Production Track students must serve on crew for all three W+H theatrical productions. They must also support our school events, concerts and recitals at the discretion of the PAC Manager.

EVALUATION

Each Conservatory candidate will be evaluated by the Performing Arts Department Chair through one-on-one meetings twice each year, once in Trimester 1 and again in Trimester 3. Student enrollment in the W+H Conservatory Program is subject to the discretion of the Performing Arts Department faculty at any time throughout a student's time in Upper School. Students who miss appointments, do not complete required activities, or do not maintain their academic standing will be removed from the program.

DIGITAL PORTFOLIO

Each candidate will be responsible for curating a well-maintained digital portfolio in the form of a shared Google slides presentation. The portfolio will be divided into the six competencies listed below. Students will demonstrate their engagement and experiences in the W+H Conservatory Program through self-reflection, photographs, videos and other elements of their choice. Portfolios will be reviewed by the Performing Arts Department Chair during the one-on-one sessions where the candidate will discuss their reflections and plans moving forward. The student will present their completed portfolio and reflections as a part of their senior recital.

W+H Conservatory students will demonstrate the following competencies:

- Acquire knowledge and mastery of skills needed for their respective discipline
- Display self-discipline to manage time and be accountable for deadlines
- Feel confident within their discipline and their ability to carry their skills to future opportunities
- Value the importance of everyone's role within the whole of a production, that every person involved in a production is vital to put something special together to engage our audiences

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- Articulate the importance of the arts to them personally, to our school community and to the world
- Advocate for the arts in society

*** SENIOR CANDIDATES must complete all requirements by JUNE 1 of their senior year.**

Course Catalogue

English Courses, Grades 9-11

English I (3 credits)

Ninth grade marks a year of transition in which students are required to approach the study of literature with a greater degree of sophistication. New emphasis will be placed on analytical thinking, while the fundamental reading, writing, speaking, and listening skills are reinforced. The focus of the class will be "bildungsroman" or “coming of age” stories that depict the psychological development, spiritual growth, and moral education of their protagonists. The students will study the conflict between the individual and society, as well as universal themes including: resilience, heroism, fate, family, home, race, identity, and acceptance. They will ultimately consider the various “journeys” (literal and figurative) they’ve taken and how these journeys have shaped them as well as their ideas about others and the world they inhabit.

Students will study a wide range of literature including, but not limited to: novels, short stories, poetry, drama, and nonfiction. Grammar, punctuation, vocabulary, composition, and usage will be taught within the context of, and applied to, the reading and writing assignments, sharpening each student’s processing and revision skills.

English II (3 credits)

The objective of sophomore English is to involve students in the exploration of World Literature from a global perspective, through an integrated approach which links reading, writing, listening, and speaking. Students in English II will consider themes of diversity, identity, and acceptance of others through a study of classic, modern, and contemporary World Literature. The selections of literature will be predicated on specific global locations and lenses. In addition, the reading selections will incorporate a study of history to better

supply a context for an appreciation and understanding of the literature, emphasizing a variety of prose and poetic genres. The course is designed to improve students' ability to read for a variety of purposes, plan and write for a wide range of audiences, apply standard English grammar and usage, speak effectively while simultaneously listening responsively, and develop and apply higher order (critical) thinking skills. In addition, the course will take a process approach to the teaching of writing. Students will work to refine the writing skills developed in English I. Assignments will focus on writing for a multitude of genres. Activities and assessments will afford students the opportunity to expand their vocabulary, refine their analyses of the literature and their understanding of various media, and improve their speaking, listening, and presentation skills. Students write critical and argumentative essays, engage in creative writing projects, and make technology-assisted oral presentations.

English II Honors (3 credits)

(Prerequisite: 95 or above in English I, at least a 90 on the in-class placement essay, and departmental approval)

English II Honors expands upon the curriculum of English II and engages students in an accelerated exploration of World Literature through an integrated approach that links reading, writing, listening, and speaking. This course will explore diverse cultures through short stories and novels, focusing on how knowledge shapes perspective. Students will consider themes of storytelling, voice, and an individual's place in society through World Literature. The selected texts examine specific global locations and lenses. In addition, the readings will incorporate a brief study of history to better supply a context for and an appreciation of the literature, emphasizing a variety of prose and poetic genres. The course is designed to improve students' ability to read for a variety of purposes, plan and write for a wide range of audiences, speak effectively while simultaneously listening responsively, and develop and apply independent critical thinking skills. Students work to refine and elevate their written expression through a variety of essay styles, including creative, analytical, and persuasive.

English III (3 credits)

English III is an in-depth study of the American experience, as captured in seminal works of past and present American authors. Selected literature is analyzed through both historical and thematic lenses, which parallel the U.S. History class. Assigned texts represent a spectrum of works in American writing, incorporating authors of diverse backgrounds and a broad selection of genres, including but not limited to: poetry, short stories, fiction, and nonfiction. The ultimate goal of this class is to expose students to various periods of American culture, history, and the ideas that shaped the times. Students' examination of American literature focuses on essential questions such as: How do time and place affect our thinking? Are 'liberty and justice' attainable for all? What makes an

informed citizen? How does cultural heritage contribute to one's identity? By the end of this course students will have developed an intimate familiarity with American literature, while also acquiring communication skills through: creative, personal, persuasive, and analytical writing, close reading, public speaking, class discussion, and collaboration.

English III **Honors** (3 credits)

(Prerequisite: 90 or above in English II H, at least a 3.25 on the in-class placement essay, and departmental approval; 93 or above in English II, at least a 3.25 on the in-class placement essay, and departmental approval)

English III Honors takes the foundation of English III and engages students in an accelerated and in-depth exploration of American literature. Students will be provided the opportunity to deepen their critical thinking and analytical skills by identifying the exigence of the texts and making broader, modern, social, political, and economic connections. An emphasis will be placed on crafting strong, complex thesis statements to support a variety of writing styles, including persuasive, analytical, and argumentative essays. Students will strengthen their writing styles by developing varied syntax, elevated vocabulary, and comprehensive connections between their evidence and commentary. By the end of the course, students will have a deepened understanding of past and present American literature, and a firm grasp of the skills required to convert thoughtful and sophisticated analysis into comprehensive written expression.

AP English Language and Composition (3 credits)

(Prerequisite: 93 or above in English II H, at least a 4 on the in-class AP placement essay, and departmental approval; 95 or above in English II, at least a 4 on the in-class AP placement essay, and departmental approval)

Advanced Placement English Language and Composition is primarily a course in both effective writing and critical reading. As students analyze a variety of non-fiction texts, they become increasingly aware of different writing styles. Understanding an author's purpose, audience expectations, and subjects, as well as the generic conventions and the resources of language, all contribute to the effectiveness of students' writing.

This course emphasizes the study of a variety of texts and a variety of writing tasks. The course allows students to write in different modes of non-fiction and on a variety of subjects: from personal experiences to public policies, from imaginative literature to popular culture. Because students must be effective writers who are prepared for university study, the course emphasizes expository, analytical, and persuasive writing, which forms the basis of academic and professional communication. In addition, it includes personal and reflective writing that fosters the development of writing facilities in any context. This course requires intensive summer preparation. Students in this course are required to sit for the AP exam in May.

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English Courses, Grade 12 only

Twelfth grade English is required of all students. Students may be considered for AP English Literature and Composition **or** participate in the English IV.

English IV (3 credits)

English IV is a survey course where students examine a wide range of literary forms including: novels, plays, short stories, novellas, etc. This course expands the literary canon by incorporating contemporary stories alongside literary classics. Students will analyze texts from a variety of historical periods and cultural perspectives while enhancing skills such as: close reading, composition, and collaboration. Emphasis is placed on analyzing theme, structure, style, and tone, as well as making connections across different works. The goals of this course are to reinforce skills established in previous Upper School English courses, while also providing students with the tools to engage in deep, comparative analysis.

AP English Literature and Composition (3 credits)

(Prerequisite: 90 or above in AP Language and Composition, at least a 4 on the in-class AP placement essay, and department approval; 93 or above in English III H, at least a 4 on the in class AP placement essay, and departmental approval; or 95 or above in English III, at least a 4 on the in-class AP placement essay, and department approval).

Students who enroll in Advanced Placement English Literature and Composition will engage in careful reading and analysis of college-level works from a range of genres including: novels, short stories, poetry, and drama. In conjunction with the readings, students will also develop skills including sophisticated use of literary terminology. The focus of the course will be intensive; discussions of literature, as well as introductions to secondary critical essays, will be the basis for evaluation. Emphasis is placed on thoughtful and cogent readings using theoretical frameworks. The intention of this class is to provide students with an academic experience paralleling that of a college level literature course. As such, there will be a writing component that focuses on expository, analytical, and argumentative writing about literature through both oral discussion and written essay format.

Students are expected to be active participants, reading, analyzing, interpreting, and contributing to their learning, in order to establish connections among their observations and the author's intentions, ultimately drawing logical inferences toward an interpretive conclusion. This course requires intensive summer preparation. Students in this course are required to sit for the AP exam in May.

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Mathematics Courses, Grades 9-12

The central goal of the Mathematics Department at Wardlaw+Hartridge is to provide our students with the proper environment in which to fully develop their abilities and talents. Students develop skills in critical, creative, and independent thinking and in computational competence. Additionally, they will also build their level of understanding for mathematical principles by investigating real-life applications, as well as by solving interactive and open-ended mathematical problems.

Students will graduate from Wardlaw+Hartridge with a deep appreciation for mathematics as a science, a language, and a tool that can be utilized to solve the problems of daily living. In addition, they will be fully prepared to handle mathematical principles in any four-year institution of higher learning. The mathematics department strongly recommends that students take four years of mathematics.

The program is designed to further enhance students' analytical skills, so that they can master the concepts and ideas presented in mathematics. Students will be expected to work independently and will be required to become proficient, not only in computer applications, but also in the use of a graphing calculator (TI-83, TI-84), Desmos, or laptop when employing mathematical concepts to solve problems. Courses in advanced mathematics will be offered to students who have successfully completed the required courses.

It is important for students to be adequately prepared in each level of mathematics in order to do well in subsequent courses. Consequently, a student who receives a final grade of 75% or lower in a mathematics course **is strongly encouraged** to take a summer school course in order to strengthen his or her understanding prior to taking another mathematics course. Students who receive grades lower than 60 **must** attend summer school. Upon completion of summer work, the student will be required to take an exam to assess their progress.

A student who is interested in taking courses in the summer, whether at Wardlaw+Hartridge or elsewhere, for the purpose of advancing in mathematics, must complete a form, prior to the first Monday in June, that requires permission from the Math Department Chairperson and the Head of the Upper School. An example would be a student who has completed Geometry and wishes to take Algebra II (or vice-versa) in summer school in order to enroll in Pre-Calculus in the fall. A student may only advance in math one time.

To receive credit, a student taking a course in summer school for advancement must have earned a grade of 87% or above in their previous/current math honors course, or a 95% or above in an academic math course. The student must earn a grade of 87% or higher in

summer school to be considered for credit.

In order for new students to be properly placed in the appropriate math course, students must take a placement test approved by the Mathematics Department.

All courses are subject to change depending on student enrollment and faculty availability.

Algebra I (3 credits)

Students are introduced to different approaches to problem solving, the language of algebra, signed numbers, linear equations, inequalities and related graphing. In addition, formulas and functions, systems of equations, exponents and radicals, polynomials, and quadratics are covered in depth.

Geometry (3 credits)

(Prerequisite: Algebra I)

This course provides students with a close study of the properties of points, lines, angles, plane figures and solids. Topics to be covered include congruence, constructions, parallelism, similarity, perpendicularity, areas, and volumes. In addition, coordinate geometry and right triangle trigonometry are introduced.

Geometry Honors (3 credits)

(Prerequisite: 93 or above in Algebra I and departmental approval)

Geometry Honors is a rigorous course that emphasizes logical reasoning, proof, and precise mathematical communication. Students explore properties of two- and three-dimensional figures, transformations, trigonometry, circles, and measurement while making connections to algebra and real-world applications.

Algebra II (3 credits)

(Prerequisite: Algebra I & Geometry)

This course covers the study of functions-linear, quadratic, inverse, exponential, logarithmic, and trigonometric. These functions will be solved and graphed with and without the graphing calculator. The real number system will be extended to include rational exponents and complex numbers.

Algebra II Honors (3 credits)

(Prerequisite: 93 or above in Algebra I **and** 90 or above in Geometry Honors or 95 or above in Geometry and departmental approval)

This course is designed to strengthen the foundation of students who wish to take AP Calculus. The course will cover topics in greater depth and at a faster pace than in Algebra

II, so more is expected of each student. This course covers the study of functions-linear, quadratic, inverse, exponential, logarithmic, and trigonometric. These functions will be solved and graphed with and without the graphing calculator. The real number system will be extended to include rational exponents and complex numbers.

Pre-Calculus (3 credits)

(Prerequisites: Successfully completing Algebra II)

Pre-Calculus lays the groundwork for further study of mathematics at the college level. Polynomial, rational, exponential, logarithmic, and trigonometric functions and their properties and applications will be studied. Sequences, series, limits, and an introduction to calculus will be covered. A TI83 or TI84 calculator is required at this level for its aid in visualization and calculation. Students gain skill in analyzing functions and drawing connections between symbolic, graphic, and numerical representations. This course is primarily designed as a final preparation for the study of calculus.

Pre-Calculus Honors (3 credits)

(Prerequisite: 90 or above in Algebra II H, or 95 or above in Algebra II and department approval)

Students use skills acquired in Geometry and Algebra II to continue to explore functions. The foundation is further strengthened for students who wish to continue in mathematics and the sciences. This course promotes cooperative learning and communication through the use of technology - the TI83 or TI84 calculator or computer. Students further develop their complete understanding of topics such as exponential, logarithmic, logistic functions, and analytic geometry in three dimensions.

Calculus (3 credits)

(Prerequisites: Successfully completion of Precalculus)

The course begins with a review of the elementary functions and an introduction to limits. The course continues with finding derivatives of functions and their applications. Techniques of integration are covered. Problem solving includes related rates, maximum and minimum problems, the area between curves, and volumes of solids of revolution.

AP Calculus AB (3 credits)

(Prerequisite: 90 or above in Pre-Calculus Honors and department approval)

The material covered in this course follows very closely the recommendations of the College Entrance Examination Board (CEEB). This course is the equivalent of a semester of college freshman calculus. Topics that are studied include: Limits, derivatives and their applications, and integrals and their applications. Students are prepared for and expected to sit for the Advanced Placement Examination in May.

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AP Calculus BC (3 credits)

(Prerequisite: 80 or above in AP Calculus AB, a minimum of a 3 on the AP Calculus AB exam and departmental approval)

The material covered in this course follows very closely the recommendations of the College Entrance Examination Board (CEEB). This course is the equivalent of a full year of college freshman calculus. Topics that are studied include: A review of AP Calculus AB topics, convergence of series, Taylor and Maclaurin series, area of polar graphs, arc length, and improper integrals. Students are prepared for and expected to sit for the Advanced Placement Examination in May.

Statistics (3 credits)

(Prerequisite: Successfully completing Algebra II or Precalculus)

Statistics is a general survey course exploring the science of statistical reasoning. Students will understand why and when to use different statistical tools and how to translate observations and questions about the world into numerical terms. Key aspects of the course will include how to use statistics to form an argument, how to evaluate the arguments of others, and how to understand statistics in reports written by other people. Reasoning is emphasized over computation and practical applications will be used to demonstrate statistical reasoning in everyday life and in non-mathematical disciplines.

AP Statistics (3 credits)

(Prerequisite: 90 or above in Pre-Calculus Honors or Calculus; or 80 or above in AP Calculus AB and permission of the department)

AP Statistics is the equivalent of a first level one-semester college course in statistics. Statistics is the science of gathering and summarizing data (descriptive statistics) and the science of making predictions and decisions based on that data (inferential statistics). The course will cover both the theory of statistical decision making and the practical application of statistical reasoning. Students will learn how to incorporate statistics into convincing written arguments and how to evaluate the statistics and arguments presented by others. Examples will be drawn from the fields of medicine, psychology, sociology, engineering, politics, sports, and many others.

This course closely follows the recommendations of the College Board and includes topics such as linear regression and correlation, sampling and experimentation, probability, and distributions (normal, binomial, and geometric). The course also includes inferential statistics such as confidence intervals and hypothesis testing for proportions and means, chi-squared tests, and analysis of variance. The students will be prepared for and expected to take the Advanced Placement exam in May.

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AP Microeconomics - Open to students in 11th and 12th

(Precalculus Honors is required as a prerequisite or corequisite course and departmental approval.)

AP Microeconomics is a college-level course that introduces students to the principles of economics that apply to the functions of individual economic decision-makers. The course also develops students' familiarity with the operation of product and factor markets, distribution of income, market failure, and the role of government in promoting greater efficiency and equity in the economy. Students learn to use graphs, charts and data to analyze, describe, and explain economic concepts. This course will examine topics to help better understand how economics works. The following areas will be explored: types of markets, costs for individual firms, and market failures. Students are required to take the AP Microeconomics exam in May.

AP Macroeconomics - Open to students in 11th and 12th

(Students must have completed or be enrolled in Pre-calc Honors or above in Math and departmental approval.)

AP Macroeconomics is a fast-paced college-level course that focuses on the decision making of individuals, businesses, and the government. Students will study a variety of economic theories and analyze their practical application in the real world. This year-long course will focus on the economy as a whole, including economic measures, economic growth, fiscal policy, and international economics. Extensive math skills are not required; however, the ability to analyze graphs and charts is essential. Students are required to take the AP Macroeconomics exam in May.

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History Courses, Grades 9-12

Global Humanities (3 credits)

(9th grade and students transferring into 10th & 11th)

As the Upper School's introduction to historical study, Global Humanities examines how humans have existed in the world alongside one another for thousands of years. The course is guided by three primary questions: (1) How can we tell true stories about the past? (2) How do different communities define themselves and share the world with each other? (3) How did the modern world come to be the way it is? Students are expected to provide thoughtful and evidence-supported responses to these and other investigative questions. They will analyze diverse primary sources, including whole books, created in Africa, the Americas, Asia, and Europe across the premodern and modern periods, providing context for many other courses.

Central to our work is skill development. Students will practice reading, research, writing, and speaking skills that they will use throughout high school and college. Additionally, constructive conversation will enhance our social learning environment, promoting mutual understanding and respect in the Upper School. Encouraging critical and imaginative thinking, Global Humanities is not primarily a memory exercise; it is a thoughtful exploration of questions and ideas, linking the past with the present.

Modern World History and Modern World History Honors

(3 credits)

(Prerequisite for Honors: 95 or above in Global Humanities and departmental approval. Students need to finish the year with a 90 of above to remain in Honors)

Modern World History explores the history of the world from a global perspective. Examining different peoples, cultures and societies from the 15th century to contemporary times in a balanced way, the course is not a survey of the West and the Rest. Rather, as a global history, it considers different incidents and patterns of human interaction within and across historical contexts. Through honoring the stories at the heart of history, Modern World History provides acquaintance with those narratives, but does so within the context of a world characterized by mutual awareness, interconnection, and common challenges. Emphasis is placed on the three Cs of world history: change, comparison and connection.

U.S. History and U.S. History Honors (3 credits)

(Prerequisite for Honors: 90 or above in Modern World History Honors or 95 or above in Modern World History and departmental approval.

This course introduces students to American history, starting with the history of Native Americans before their contact with Europeans and continuing to the present day. The

course moves chronologically through 8 units, reflecting different political, social, economic, cultural, and environmental changes in the United States. Students are encouraged to think deeply about historical events and build their historical thinking skills, such as: comparison, causation, contextualization, consequences, continuity and change over time, and argumentation in general. Students will develop their skills in synthesizing and summarizing material in their homework reading assignments and will reflect critically on the open-ended quiz and exam questions. In addition, several times throughout the year students will work on projects that develop these critical thinking skills in creative ways.

AP U.S. History **(3 credits)**

(Prerequisite: 95 or above in Modern World History or 93 or above in Modern World History Honors) and departmental approval. Students need to finish the year with a 90 of above to remain in AP)

Advanced Placement United States History takes a chronological approach (1491 – present), through the nine time periods designated by The College Board. Each lesson aligns with a specific unit topic and goal of the Course and Exam Description created by The College Board. Students will develop their historical thinking skills, their argumentation skills, and their essay writing. Students will learn and synthesize material in the required HW reading assignments. Assessments contain both teacher-created projects and quizzes/exams that directly mimic the AP-style questions as training for the AP Exam. Students taking this course can feel confident that they will be well-prepared for the AP exam in May, which students are required to take as part of this course. After the exam, students will complete a month-long personalized project, which includes reading a non-fiction book of their choosing, to further their understanding of American history.

History Department Electives

AP Psychology **(3 credits) Open to students in 12th grade ONLY**

(Prerequisite: 95 or above in English III & U.S. History or 90 or above in AP Language & U.S. History Honors or AP U.S. History & departmental approval)

This course introduces students to the study of human behavior and mental processes. The main topics covered are the history of and approaches to the field of psychology, including: research methods, biological bases of behavior, sensation and perception, consciousness, learning, cognition, motivation and emotion, development, personality, intelligence, mental health, and social psychology. In addition to preparing students to take the AP Psychology exam, the course will enable students to explore how psychologists think. Students will be exposed to the critical thinking and compassion that the field of psychology brings to the human condition. This course requires intensive summer preparation (reading/note-taking). Students in this course are required to sit for the AP exam in May.

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Global Citizenship (1 credit) Independent Study

(REQUIRED FOR AND OPEN ONLY TO: 11th GRADE GSP STUDENTS)

Through this 1 trimester course, students will explore the concepts of global citizenship through assigned readings, videos, online discussions, and interactive activities. With the UN Sustainable Development Goals as their basis for learning, students will also select one UN SDG to research and explore throughout the trimester. Each week students will read and summarize an article relevant to their topic. At the conclusion of the course, they will synthesize the information learned throughout the trimester and propose potential solutions to the issue. This course is a requirement for the Global Scholars Program, and students must have a final grade of 93 to remain in the GSP.

Global Conflicts Since 1900 **(3 credits) - Open to students in 10th-12th grades**

Global Conflicts Since 1900 is a full year course that examines the various wars, revolutions, genocides, and freedom movements of the 20th and 21st centuries. This class will guide students through the 20th and 21st centuries to highlight the conflicts that have shaped the modern world. These events will be examined from a global perspective with importance placed on the causes and effects and modern consequences of various conflicts. Students will use primary and secondary sources along with other mediums to gain a well-rounded comprehension and understanding of the origins, events, and consequences of these conflicts.

AP Human Geography **(3 credits) - Open to students in 10th-12th grades**

(Prerequisites: 95 or above in previous non AP history course or 90 or above in previous AP history course, and departmental approval)

Advanced Placement Human Geography calls students to thematically explore the world's varied physical regions and their geographical subtexts that include, among other components, economic geography, cultural geography, political geography, and urban geography. The course draws from the students' prior knowledge of history and culture, and challenges them to a greater understanding of how people have interacted, and continue to do so, with each other, their natural environment, and their technological innovations. Most assessments will directly reflect the structure of the AP examination, and students are required to take the AP exam in May.

AP U.S. Government & Politics **(3 credits) - Open to students in 11th & 12th grades**

(Prerequisite: 95 or above in previous non AP history course or 90 or above in previous AP history course, and departmental approval)

Advanced Placement United States Government and Politics follows the 5 Unit structure designed by The College Board. Each lesson aligns with a specific unit topic and goal of the Course and Exam Description created by The College Board. Across the school year,

students will engage in creative activities that prioritize student-centered learning techniques. Students will be assessed using both teacher-created projects and assessments that directly mimic the AP-style questions as training for the AP Exam. Students taking this course can feel confident that they will be well-prepared for the AP exam in May, which students are required to take as part of this course. After the exam, students will complete a month-long personalized project where they will write a bill to further their exploration of American government and politics.

Capstone Research Seminar **(3 credits) - Open to students in 12th grade ONLY**

(Prerequisites: Grade 12, Global Scholar or special departmental approval, and summer proposal assignment completed before the first day of the academic year)

The senior Capstone Research Seminar sharpens and integrates select seniors' research, writing, analysis, presentation, and project management skills in preparation for college. Each student designs and executes an original university-level research project that demonstrates commitment to the common good. Their yearlong project identifies and defines a real life problem of global significance; analyzes the problem in depth from a variety of perspectives; and proposes and justifies a course of action to address the problem. Finished projects are presented to the school community and published as senior theses in the *Capstone Research Journal*. This course is a requirement of the Global Scholars Program.

Science Courses, Grades 9-12

The study of science deals with natural systems, with observations and methods of inquiry using the scientific method, and with specific content areas such as biology, chemistry, and physics. The quest of science is to find increasingly accurate explanatory models of how the universe functions. Students learn about these current models and some of the questions that remain unanswered. Within this context, the science curriculum utilizes and reinforces mathematical skills learned in mathematics courses as well as computer technology for data collection and analysis. The science courses all involve research and laboratory work using appropriate technology, and students are encouraged to question and to use the principles of science, technology, engineering and mathematics to further their learning.

Students are required to complete three years of science for a minimum of nine credits. With a view to their future as adults living in an increasingly science and technology-oriented society, they are strongly encouraged to complete a fourth year of science. Students take Biology in ninth grade (3.0 credits), Chemistry in tenth grade (3.0 credits), and Physics in either eleventh or twelfth grade (3.0 credits).

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All science students are introduced to the principles of science, technology, engineering, and mathematics (STEM) through their individual science courses. After completing a year of Biology, tenth graders and up have an opportunity to enroll in many electives including Molecular Genetics in Biology. This course is the open door to consider Research projects in Genetics (see description below). Science department electives include AP courses in biology, chemistry, physics and environmental science as well as a wide variety of topics that include subjects as diverse as anatomy and physiology, organic chemistry and molecular biology. Research opportunities are also available.

All courses are subject to change depending on student enrollment and faculty availability.

Biology (3 credits)

In this course we will be studying living organisms at the cellular and molecular level and work our way through to the classification, diversity and function of organisms. The curriculum topics are used to promote a deep understanding of the diversity, complexity and interconnections between life on earth. Scientific technique and laboratory skills will be enhanced through regular lab activities and write-ups. Students will learn in a hands-on environment where critical thinking and inquiry-based learning will be encouraged. The following lists the topics that we will cover and the likely order in which they will be addressed (We will not be spending equal amounts of time on each of these topics.): Scientific technique, The Molecules of Cells, A Tour of the Cell, The Working Cell, How Cells Harvest Chemical Energy, Cell Growth and Division, Introduction to genetics, DNA and RNA, Diversity of life and classification, Plants, Human Organ-systems.

Biology Honors (3 credits)

(Prerequisite: An average of 95 or above in eighth grade science and Algebra I, and departmental approval). Students entering 9th grade from other schools will receive a placement test, beginning SY 2026/2027.

This biology honors course will cover the same basic topics as the general biology course, but the topics will be covered in more depth and will require a faster pace of learning. This class will also do a disease-related individual project each trimester. Lab work is an essential part of this course.

Chemistry (3 credits)

(Prerequisite: Successful completion of Algebra I)

This is a comprehensive course on the following topics: the scientific method, measurement, matter and change, atomic structure, chemical reactions and stoichiometry, behavior of gasses, solids, liquids and solutions, acid-base, equilibrium and electrochemistry. Lab exercises and lab reports are an integral part of the course.

Chemistry Honors (3 credits)

(Prerequisite: An average of 90 or above in Biology Honors/Physics Honors or an average of 95 or above in Biology/Physics and departmental approval. Also, must have an average of 93 or above in Algebra I. Co-requisite: Geometry/Geometry Honors or Algebra II/Algebra II Honors)

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This course is designed for students who have shown a proficiency in studying science and who have exhibited interest in and enthusiasm for science. This course is intended to help students understand the physical world from a chemical perspective, and use principles of chemistry to more deeply understand how to assess current issues they will encounter involving science and technology. Students will develop a lifelong awareness of the potential and the limitations of science and technology. Topics to be studied include applying the scientific method, chemistry laboratory skills, atomic structure, the classification and structure of matter, ratio and proportion of chemical reactions, acid-base chemistry, kinetics, thermodynamics, electrochemistry, organic chemistry, and biochemistry. Critical thinking (the ability to carry out systematic thought processes in making decisions and solving problems), inquiry (solving problems through scientific investigation), and science ethics are stressed in this class.

Physics (3 credits)

(Prerequisite: Successful completion of Algebra I and Geometry)

This is a general course in physics that stresses hands-on exploration, conceptual reasoning, and hypothesis testing. Connections to everyday life are emphasized. Topics may include mechanics, waves, optics, static electricity, circuits and magnetism.

Physics Honors (3 credits)

(Prerequisite: An average of 90 or above in Chemistry Honors or an average of 95 or above in Chemistry and departmental approval. Co-requisite: Algebra II/Algebra II Honors.)

This course is an intensive introduction to physics with an emphasis on Newtonian mechanics and problem-solving. Kinematics, Forces, Momentum, Energy, Circular Motion, and Gravitation are covered during the first two trimesters. Waves, static electricity, circuits, and optics are covered in the third trimester. Trigonometry, algebra are used extensively. Lab work focuses on the graphical analysis of data.

AP Biology (3 credits)

(Prerequisites: A 90 or above in Biology Honors or Chemistry Honors or a 95 or above in Biology or Chemistry and departmental approval)

This course is offered to juniors and seniors. It is designed to prepare students for the AP Biology Exam, but more importantly, to prepare them for college-level biology courses. Topics follow the AP syllabus and include molecular biology, cells, genetics, evolution, morphology, and physiology. Laboratory work includes required labs in the AP syllabus and the use of computers. The course involves large volumes of reading including summer reading. Students in this course are required to sit for the AP exam in May.

AP Chemistry (3 credits)

(Prerequisite: An average of 90 or above in Chemistry Honors or a 95 or above in Chemistry and departmental approval. Co-requisite: Algebra II or a higher-level mathematics course.)

This is a university-level course in general chemistry designed to prepare students for the AP Chemistry Exam by exploring in greater depth topics covered in a previous year-long

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honors chemistry course. Critical thinking and deductive reasoning skills, as well as mathematical proficiency, are vital to course success. The course covers all topics on the AP syllabus and assessments mirror the form and content of the AP exam. Extensive lab work with significant independent problem solving is required. Students develop the ability to work independently in the lab by designing and conducting several project-length experiments. Students in this course are required to sit for the AP exam in May.

AP Physics C (Mechanics) (3 credits)

(Prerequisite: An average of 90 or above in Physics Honors or a 95 or above in Physics; and a minimum of 87 in Pre-Calculus and departmental approval. Students who have completed an appropriate math course satisfactorily in the summer, may be considered for entry by the department. Co-requisite: Calculus)

This is a university-level, calculus-based course in Newtonian Mechanics that builds on the foundation established in Physics Honors. In addition to studying motion, force, energy, and momentum at greater depth, we will examine their rotational analogs, like torque and angular momentum. Problems that cut across multiple topics will be used to develop a comprehensive understanding of the material. Lab work is used to motivate and test quantitative predictions. Students in this course are required to sit for the AP exam in May.

Elective Courses in the Science Department

Human Anatomy and Physiology (3 credits)

(Prerequisite: Biology or Biology Honors, available to grades 10, 11, 12)

Anatomy and Physiology is a year-long course that covers the major components of the Human Body including all of the major body systems. Students will be required to memorize the names and functions of each system, but more importantly understand how they work and how they are intertwined. This class will include components of labs, case studies, and STEM projects throughout the year to aid in understanding. This course is beneficial to students who are interested in the health science and medical field.

AP Environmental Science (3 credits)

Available to grades 11 and 12)

(Prerequisite: Completion of Biology or Biology Honors and Chemistry or Chemistry Honors and Algebra I with a recommended average of 93 or above and departmental approve)

Advanced Placement Environmental Science Project Based Learning is a college-level environmental science course. It is designed to prepare students for the AP Environmental Science Exam through a hybrid curriculum of traditional teaching methods and project based learning, to answer the driving question, “How can we live more sustainably?” This course’s topics follow guidelines established by the College Board with the goal to provide students with scientific principles, concepts, and methodologies required to understand interrelationships in the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these

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problems, and to examine alternatives for resolving and/or preventing them, including environmental policies and legislation. Experiences in the laboratory, field and through virtual labs will provide students with opportunities to relate classroom concepts to real-world applications of environmental science. Summer on-line work will be required to prepare for the mathematical concepts used in the course. Students in this course are required to sit for the AP exam in May.

Molecular Biology, Technology and Bioethics **(3 credits)**

(Available to grades 9-12)

Students in this "hands on course" will have the opportunity to learn the exciting molecular technology currently used in biological fields of medicine, diagnosis, forensics, infertility, drug development, paternity testing , food technology, climate change, pollution control, vaccine development and more. This important technology will be part of the next generation's everyday lives.

This course will include performing Molecular Biology techniques including DNA isolation, polymerase chain reaction, restriction digestion, DNA fingerprinting, gene editing (crisprs), and gel electrophoresis. Bioinformatics will be critical in analyzing data. An in-depth discussion of the ethics in present and future DNA research, DNA collection and DNA testing will be examined. Successful completion of this course will give students the needed background to take the Research In Genetics course the following year.

PharmaVentures **(3 credits)**

(Available to grades 9-12)

A multidisciplinary experience fusing teamwork, scientific inquiry, mathematical rigor, business acumen, entrepreneurial spirit, project management proficiency, ethical considerations and strategic decision-making prowess.

Elective Courses in Science, Technology, Engineering, and Mathematics (STEM)

Students will one day become leaders in a high-tech global economy. Providing them with opportunities to integrate the sciences, mathematics and technology in creative problem solving will give them significant practice in STEM skill building and communication. In addition, learning to apply an engineering model to their inquiries will prepare students for using critical thinking and creativity in their approach to challenges in college and beyond. Each STEM elective sets the stage for students to identify an unanswered question. As they work toward answering that question, they will be encouraged to use an integrated problem-solving approach. They will research a topic, consult with team members, identify a problem they want to solve, design tests, determine whether they need to build models or simulations, and when prepared, they will present their work for peer review.

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Honors Research in Genetics (3 credits)

(Prerequisite: 95 or above in Biology, or 90 or above in Biology Honors and departmental approval or successful completion of the Molecular Biology Course. Students interested in this program will need to submit an application.)

During this course students will have the opportunity to become a part of an international research project and make discoveries that were previously unknown. Students will learn and use some of the latest molecular, genetic and immunohistochemical techniques used in the best research labs in the world.

Each student will work independently on a research project and will be partnered with an active investigator at Stanford University. The student will have the opportunity to discuss their research results at scientific conferences and workshops and work with other science students and faculty around the world. Students may continue their research project the following year/s if they choose.

Advanced Research in Genetics II (3 credits)

A second year of this research course can be taken with approval and successful completion of Honors Research in Genetics. Students interested in this program will need to submit an application.

Engineering Your World (3 credits)

(Prerequisite or Corequisite: Physics or Physics Honors. (Available to grades 10-12)

Students in this year-long course will develop engineering habits of mind as they discover engineering's role in shaping and improving the world. There are a total of eight units that vary between explorations and design challenges as well as an introductory unit detailing engineering principles and norms. Explorations include Designing for Customers, Understanding Data: Designing Coffee, and Programming: Electronic Music. More in-depth design challenges include Discovering Design: Pinhole Camera, Designing with Data: Safer Buildings, Reverse Engineering: Product Redesign, and Systems Engineering: Aerial Imaging. Another main component of this course is outside research projects where students discover different careers in engineering associated with the current unit. This course is being taught in conjunction with the University of Texas' Cockrell School of Engineering and is intended for students who are interested in the field of engineering.

World Language Courses, Grades 9-12

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Wardlaw+Hartridge offers students the opportunity to study Mandarin Chinese, Latin, or Spanish. Students are required to complete three consecutive years of at least one world language while in Upper School. These core languages can culminate in either level V or the Advanced Placement language courses. Students may elect to begin level I in a different language in addition to their graduation requirement language.

The department emphasizes the appreciation of the cultures represented by all the countries where the target languages are spoken. In addition, the exchange/travel programs with Spain and China provide our students with authentic language and cultural enrichment and foster long-lasting relationships among the student participants and their families, as well as between our school and the host school.

All new students to Wardlaw+Hartridge are required to take a placement test to determine the most appropriate level of study for their abilities at the time the placement test is taken. Students will be placed by the World Language Department Chair, in conjunction with the target language classroom teacher recommendation.

It is important for students to be adequately prepared in each level of a foreign language in order to do well in subsequent courses. Consequently, a student who receives a final grade lower than a **70** in a world language course **must** take the course again the following year to show mastery of that particular level. In such a case, the student, parent(s)/guardian(s), and advisor are encouraged to have a conversation with the classroom teacher and the World Language Department Chair to develop a plan of action for student success.

Any student wishing to complete summer work in their target language, regardless of motivation, needs program approval from their language teacher and the World Language Department Chair. For example, a student supplementing their previous coursework (as stated above) needs to determine an action plan with their teacher and the Department Chair. Similarly, a motivated student wishing to advance their language study over the course of the summer to accelerate their placement needs to speak to their classroom teacher and the Department Chair well before the summer begins. It is unusual for a language student to accelerate an entire year's worth of material in a summer, and it is therefore difficult for a student to advance over a level of study. However, if through discussions with the classroom language teacher and the Department Chair, it is determined that an immersion program (either abroad or domestic) is approved and the right course of action, it is possible for a student to advance. Upon completion of the approved immersion course, the student will need to take a placement exam (written and oral components) to be placed into the appropriate level of study. Please note that merely completing an immersion course over the summer does not guarantee advancement to the next level of study in the Upper School language program; the student will need to prove that their language abilities have advanced enough to join the course.

Students completing three consecutive years of Spanish or Mandarin Chinese will be able to:

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- Converse clearly.
- Narrate and describe in detail.
- Understand connected discourse.
- Use reading strategies to comprehend authentic print media.
- Apply cultural knowledge to social interaction.
- Discuss the significance of the geography, history and political contributions of the target culture(s).

Students completing three consecutive years of of Latin will be able to:

- Read, understand and interpret Latin prose and poetry.
- Speak and write knowledgeably about Greco-Roman Culture.
- Make cross-cultural comparisons and contrasts with Greco-Roman culture across the curriculum.
- Cultivate critical perspective on the ramifications of the Greco-Roman legacy in contemporary society.

All courses are subject to change depending on student enrollment and faculty availability.

Mandarin Chinese I (3 credits)

This course is intended to introduce students to age appropriate basic Chinese language and cultural content. Students learn to identify and produce Pinyin and four tones of Chinese pronunciation. They master some common Chinese characters, words, and sentences related to daily life and school life. Topics include greetings, family and friends, date and time, hobbies, shopping, weather, etc. Through a variety of meaningful and authentic activities, the course trains students in four communicative skills. In addition to traditional textbooks, a variety of tools are used to make learning an interesting and productive experience. Such tools include the Smart Board, computer, Internet, Skype, CDs, videos, posters, etc.

Mandarin Chinese II (3 credits)

(Prerequisite: 70 or above in Chinese I and department recommendation)

This course continues to build students' communicative skills and develop their cultural understanding and insights. Instructional materials and activities are carefully selected to enable students to communicate in a practical and authentic language environment. Considerable speaking practice and basic reading and writing exercises help students to master grammar and to expand vocabulary. Students create short videos about themselves, family and friends, daily routines, and school life. In addition to traditional textbooks, a variety of tools are used to make learning a meaningful and productive experience. Such tools include the Smart Board, computer, Internet, Skype, CDs, videos, posters, etc.

Mandarin Chinese II H (3 credits)

(Prerequisite: 95 or above and department recommendation)

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The Mandarin Chinese II H course focuses on building the communicative skills while introducing students to level and age appropriate cultural content. Instructional material and activities are carefully selected to enable students to communicate in a practical and authentic language environment. Students functioning within Chinese II can understand and master basic language materials related to common daily settings. Students begin to develop confidence and interest in learning the Chinese language. Considerable speaking practice and basic reading exercises will help students to master the tones of Chinese and grammar. Chinese culture, including holidays, cuisine, art and crafts, and music, is an important part of the course.

Mandarin Chinese III (3 credits)

((Prerequisite: 70 or above in Chinese II and department recommendation)

At this level, students expand their vocabulary, study more advanced patterns, and develop greater communication competency in listening, speaking, reading and writing. Meaningful and authentic tasks are given to facilitate communication about their daily lives, school activities, friends and family, and their roles in both a community and global context. Students participate in various research and presentation projects, listen to guest speakers, and exchange activities with students in China via e-mail and Skype. Through these valuable experiences, students' knowledge of contemporary and traditional Chinese culture is further enhanced. Online resources are constantly adapted for understanding and researching Chinese current affairs, culture, society, education, etc.

Mandarin Chinese III H (3 credits)

(Prerequisite: 87 or above in Chinese II Honors and department recommendation or 95 or above in Chinese II and department recommendation)

In Chinese III Honors, students mainly continue the development of reading and writing skills via reading of essays and short stories. Class time is used for group discussions, text structure analysis, teacher and student presentations, etc. The goals are to prepare students to be more proficient and independent language learners.

Mandarin Chinese IV (3 credits)

(Prerequisite: 70 or above in Chinese III and department recommendation)

Chinese IV is a course for students who have a genuine interest in continuing to learn the Chinese language and culture and who are willing and able to challenge themselves to a higher level of learning. Through viewing and listening to authentic media, students will gain knowledge of current affairs and modern China's society and schools, as well as appreciate China's rich culture. Frequent compositions, presentations, projects and participation in activities with our partner school in China
will further refine students' communication skills and enable them to use the language to solve real-life problems. Upon completion of Chinese IV, students will be recommended for either Chinese V or AP Chinese Language.

Mandarin Chinese IV H (3 credits)

(Prerequisite: 87 or above in Chinese III Honors and department recommendation or 95 or

above in Chinese III and department recommendation)

The Chinese IV Honors course is a precursor to the Advanced Placement Chinese Language course. In this course, students learn to read contemporary short stories, analyze grammatical structures, and conduct real life conversations. In addition, students will explore, research, and present about Chinese society and culture in a more in-depth and extensive way, with a focus on cultural perspective. Pre-AP content will be introduced and practiced. Upon completion of Chinese IV Honors, students will be recommended for either Chinese V or AP Chinese Language.

Mandarin Chinese V H (3 credits)

(Prerequisite: 87 or above in Chinese IV Honors and department recommendation or 95 or above in Chinese IV and department recommendation)

The course further develops students' awareness and appreciation of cultural products, practices and perspectives. Students will use authentic Chinese materials and sources to develop their language skills in multiple modes of communication, including listening, speaking, viewing, reading, and writing. In addition, students will be using many materials from the AP course to expand their learning and enhance their proficiency.

AP Chinese (3 credits)

(Prerequisite: 95 or above in Chinese IV Honors and department recommendation)

The AP Chinese Language and Culture course engages students in an exploration of significant events and people of Chinese history, as well as contemporary Chinese society and culture. Students learn to communicate more effectively in real-life situations using authentic materials such as newspaper and magazine articles and websites. To best facilitate the study of language and culture, the course is taught almost exclusively in Chinese. Students completing this course are expected to take the AP Chinese Language and Culture Exam in May.

Latin I (3 credits)

In Latin I, students learn the fundamentals of Latin required to read at the basic level. These include: translating according to case instead of word order (the fundamental difference between English and Latin Grammar), acquiring a knowledge of and manipulating the case endings of nouns in all five declensions, 212 and 333 adjectives in all three degrees, basic pronouns, the present, imperfect, and perfect tense, and the third and fourth conjugation future. We will also cover a variety of topics involving the Romans themselves, the world they lived in, and their legacy to the present. In particular, year one will focus on the early stories of Roman mythology and history, from the Kingdom to the early Republic.

Latin II (3 credits)

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(Prerequisite 70 or above in Latin I and department recommendation)

Latin II focuses on a variety of grammatical forms, building on last year's foundation. Students complete the future tense and the tenses of the perfect system (pluperfect and future perfect), learn the passive voice in all six tenses, the present active, perfect passive, and future active participles, and the ablative absolute. In terms of Roman culture, this year will continue with mythology and history, examining the Greek legacy to the Romans, and some of the Romans' early neighbors.

Latin II Honors (3 credits)

(Prerequisite: 95 or above in Latin I and department recommendation)

Latin II Honors covers the same material in Latin II, but at a faster pace, and with a greater responsibility on the student in terms of attention to detail and the amount of translation required.

Latin III (3 credits)

(Prerequisite: 70 or above in Latin II and department recommendation

Latin III focuses on a variety of grammatical constructions, finishing the core Latin grammar and giving students the capacity to read authentic texts. These include the ubiquitous subjunctive clauses with "ut" and "cum," deponent verbs, gerunds, gerundives, ablative absolutes, indirect discourse, relative clauses of purpose and characteristic, indirect questions, and the remaining participles. After this grammatical instruction, students will begin to read texts by Romans authors. Culturally, students will focus on the collapse of the Roman Republic into the Empire, and all the political, social, and military consequences therein.

Latin III Honors (3 credits)

(Prerequisite: 87 or above in Latin II Honors and department recommendation or 95 or above in Latin II and department recommendation)

Latin III Honors covers the same material in Latin III, but with a greater responsibility on the student in terms of attention to detail and the amount of translation required. Additionally, Latin III honors translations will consist of more difficult prose and poetry.

Latin IV Honors (3 credits)

(Prerequisite: 87 or above in Latin III Honors and department recommendation or 95 or above in Latin III and department recommendation

In Latin IV Honors, students will read AP selections of Caesar's *De Bello Gallico,* and Vergil's *Aeneid,* but with a less rigorous workload than the AP class. In this year, students will learn to analyze the rhetorical style of Caesar, with his long, complex constructions, and subtle political discourse. For Vergil, students will begin the complicated task of translating poetry, which in many ways is almost a language style unto itself, and also

learn to analyze poetic devices and figures in Latin poetry. Culturally, students will continue to examine the Roman revolution, but in the context of the authors directly and the issues they discuss – namely, the political chaos in the time of Caesar, and the reforms of Augustus.

AP Latin (3 credits)

(Prerequisite: 87 or above in Latin IV H or department recommendation, or 95 or above in Latin IV and department recommendation)

Having developed both the linguistic and literary skills necessary to handle difficult texts in both prose and poetry, students will complete the required AP Latin readings of Pliny, Vergil, and the rotating selection of teacher's choice texts. In this, the students are expected to apply their skill set of translation, analysis, and cultural knowledge to fully appreciate and discuss these important literary and historic texts. Additionally, students will complete an analytical project on a rotating selection of texts, spanning both genre and time period, to further develop their skillsets specifically required on that section of the exam. Also, scansion of Latin meters will continue to be developed, and students will be responsible for vowel quantity of common words and endings.

Spanish I (3 credits)

This course is intended to introduce the student to the Spanish language by incorporating the instruction of grammar and vocabulary with basic speaking, reading, writing, and listening skills. This course also develops student insight into the culture of the Spanish speaking world. Activities include acting out scenarios, greeting others, talking about preferences and events in the present and near future, and describing people and school-related objects. Students also learn about cultural differences relating to meals, school schedules, and ways in which Spanish-speaking people address each other. In addition, lessons cover the use of basic regular and irregular verbs in the present tense, sentence structure, and adjectives and their agreement. The use of technology is integrated as a tool for teaching and learning. This includes the use of the Smart Board, computer, Internet, films, and music to increase understanding, reinforce newly acquired skills, and to engage the students in authentic situations related to the topics of study.

Spanish II (3 credits)

(Prerequisite: 70 or above in Spanish I and department recommendation)

This Spanish course is designed to help students make the transition from Middle School language classes into the Upper School World Language Program. The focus of instruction is the continued development of students' proficiency in the language, with emphasis on communicative competence. Speaking, listening, writing, and reading skills are assessed in a variety of ways. The use of technology is integrated as a tool for teaching and learning. This includes the use of Smart Board, computer, Internet, films, and music to increase understanding, improve acquired skills, and to engage the students in authentic situations

related to the topics of study.

Spanish II Honors (3 credits)

(Prerequisite: 95 or above in Spanish I and department approval)

Spanish II Honors is the bridge joining basic knowledge of the Spanish language to a more advanced level of learning. Students will now start preparing for the possibility of an extended sequence of language study, culminating in Advanced Placement Spanish. The students use technology and experience literature, culture, history, and geography to establish a solid foundation. Emphasis is placed on the communication of ideas and information in Spanish with fluency and accuracy.

Spanish III (3 credits)

(Prerequisite: 70 or above in Spanish II and department recommendation)

This course is the continuation of Spanish II. It consists of a study of the grammar and vocabulary of the Spanish language on an advanced level. The study of all the simple tenses is completed. Students develop greater listening comprehension and speaking ability through the use of daily communicative activities. In addition, the use of technology is integrated as a tool for teaching and learning. Students use technology in their study of the culture, history, and geography of Spanish speaking countries. Students also focus on strengthening their vocabulary through reading excerpts from classical and contemporary Spanish literature.

Spanish III Honors (3 credits)

(Prerequisite: 87 or above in Spanish II Honors and department recommendation or 95 or above in Spanish II and department recommendation)

This course is the continuation of Spanish II Honors. Students continue to develop skills in listening, speaking, reading, and writing. Students' accuracy in expression will be expanded with the study of advanced grammar and vocabulary essential for discussion of topics beyond basic needs. Vocabulary acquisition will be expanded through the reading of short stories. Various opportunities are afforded the students to express themselves, both orally and in writing. The use of technology is integrated as a tool for teaching and learning. This includes the use of the Smart Board, computer, radio, and TV to increase understanding, reinforce newly acquired skills, and to engage the students in authentic situations related to the topics of study.

Spanish IV (3 credits)

(Prerequisite: 70 or above in Spanish III and department recommendation)

The course provides an option for those students who are interested in continuing in the study of the Spanish language and culture, but who are not necessarily interested in the Pre-AP and Advanced Placement course of study. In addition to fine tuning grammar skills, the students will reinforce and further their knowledge through their continued development of communication skills in Spanish. Via the viewing of authentic media, the reading of short literary works, and the use of technology to support and enrich their

learning, the students will be engaged in the exploration of current events and universal issues and themes in order to analyze them from the perspective of both the U.S. and Spanish-speaking cultures. Upon completion of Spanish IV, students will be recommended for either Spanish V or AP Spanish Language.

Spanish IV Honors (3 credits)

(Prerequisite: 87 or above in Spanish III Honors and department recommendation or 95 or above in Spanish III and department recommendation

This course is designed as a survey course to increase reading comprehension, writing, and conversational fluency at an advanced, more native-like level. This course offers a greater quantity of vocabulary, idiomatic expressions, and advanced grammar. Spanish IV Honors provides a more in-depth study of literature, culture, history, and political movements throughout the Spanish-speaking world. The intensive review of grammar, ample writing assignments, and variety of literature equip students to communicate more effectively in the Spanish language. The use of technology is integrated as a tool for teaching and learning. This includes the use of the Smart Board, computer, Internet, films, and music to reinforce acquired skills and to engage the students in authentic situations related to the topics of study. Upon completion of Spanish IV, students will be recommended for either Spanish V or AP Spanish Language.

Spanish V Honors (3 credits)

(Prerequisite: 87 or above in Spanish IV Honors and department recommendation or 95 or above in Spanish IV and department recommendation)

Spanish V, an alternative to AP Spanish, is a continuation of Spanish IV. A diverse range of media works from the Spanish-speaking world are used to promote discussion of relevant historical, cultural and current event issues.

The underlying format of this course is that of a tour. Through this tour format the students will be exposed in a more in-depth manner to the geography, history and rich cultures of the vast Spanish-speaking world. Through their coursework they will continue to expand their use of higher level vocabulary as they acquire a knowledge base of more advanced grammatical structures while they read, write and discuss topics presented in class. Newspapers, magazines, online resources, and selected literary works will serve as source material in conjunction with the basal text. The primary focus of this class is to increase the students' ability to communicate in Spanish with ease and confidence as they grow in understanding of the perspectives, processes and products that represent the unique contribution of Hispanics to world culture.

AP Spanish (3 credits)

(Prerequisite: 87 or above in Spanish IV Honors and department recommendation)

The course is structured to meet the standards of the Advanced Placement Spanish Language Examination as set forth by the College Board. Criteria for selecting students include student interest and motivation, demonstrated ability in previous Spanish courses, and teacher recommendations. This course requires that students read literary and

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journalistic prose and poetry, understand lectures and conversational Spanish, participate in class discussions and conversations, and write essays in Spanish. Students completing this course are expected to take the Spanish AP Language College Board Examination in May.

Computer Science & Technology, Grades 9-11

Computer technology plays an integral and expanding role in all levels of curriculum at Wardlaw+Hartridge, PreK to Grade 12. In the Upper School, all students and faculty have a laptop computer, making technology an immediate part of Upper School life. Computers are both an end in themselves in the school curriculum (knowing how to use the applications necessary for academic functioning: keyboarding, word processing, spreadsheet, desktop publishing, multimedia presentation, Internet research, and email communications) and a necessary means to an end in the preparation, calculation, and submission of traditional school assignments. The Computer Science Department provides course instruction to students and training to faculty.

Students rising from our Middle School have a firm foundation in the technology applications stated above. A unit is included at the beginning of our freshman year courses to make sure that all ninth graders are comfortable using their new laptops, including accessing our networked printers and emailing their instructors. Time is also spent reviewing our school wide Acceptable Usage Policy.

All courses are subject to change depending on student enrollment and faculty availability.

AP Computer Science A (3 credits)

(Prerequisite: Permission of the department Corequisite: Algebra II)

This course will prepare students for the AP exam given in May. The syllabus will focus on the basic building blocks of computer science and programming. Topics include control structures, primitive and class data types such as arrays, ArrayLists, Strings, methods, and recursion. Students will learn how to manipulate data to create more sophisticated programs, with topics including class design, algorithm development and user-defined data types. The course is taught with a project-based-learning approach, which allows students to explore new concepts through hands-on assignments. Students are required to take the AP Exam.

Elective Courses in the Computer Science & Technology Department

Yearbook: Design and Production (1 credit)

The focus of the class will include all the basics involved in yearbook design and production, from initial brainstorming ideas to publication. Topics will include the function of a yearbook, organizing the content and thematic development. Students will be graded based

on two criteria – productivity in class and satisfactory completion of their page assignments by stated deadlines.

Visual and Performing Arts, Grades 9-12

Art and music are universal languages that have always played a key role in the story of our civilization. The arts transcend boundaries of nation, age, race, and religion to speak their own language. The beautification of our world has gone on throughout history as people strive to produce, record, and order the physical elements of their environment. The arts not only impact academic achievement, but they also shape the way our students understand the world around them. Our Visual and Performing Arts curricula convey our commitment to educating the whole student and reflect our philosophy that, as subjects, art and music are not an extra, but rather an integral part of a student's education and life. To enrich our curricula, off campus field trips are offered.

Some of the courses do have prerequisites or corequisites. Please refer to the write up of each course for these requirements.

All courses are subject to change depending on student enrollment and faculty availability.

Visual Arts

Sculpture I (3 credits)

This course explores diverse styles and materials of three-dimensional form. Students are exposed to the additive and subtractive techniques of construction and carving using clay, wire, paper, wood, and mixed media variety of mediums to challenge students' imagination. Creating sculpture helps students to visualize and strengthen abstract reasoning. While emphasis is on hands-on activity, students will develop their observational skills. related topics such as the work of various sculptors and historical and contemporary issues in sculpture are also included.

Sculpture II (3 credits)

(Prerequisite: Art I or Sculpture I with a 90 average and department chair approvaI)

This course is for those students who show a strong aptitude and curiosity about sculpture. Building on the basic construction skills acquired in Sculpture I, this course provides an opportunity for students to further develop three-dimensional skills with the introduction of new mediums which present more challenging problems. Sculpture II students are also offered the option of developing a proposal, along with the guidance of the department, for the alternative of creating a series of theme-based projects to be produced over the course of the program.

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Art I (3 credits)

The basic principles of design, color, and composition, with an emphasis on the use of space, are studied through a wide range of art experiences, including drawing, painting, sculpture, printing, ceramics, and art history.. Students are required to use their laptops for their monthly art criticism exercises and when referencing imagery for projects.

Art II (3 credits)

(Prerequisite: Art I)

Students are provided the opportunity to improve their drawing skills through a series of projects using a variety of mediums, techniques, and methods. Color theory is also studied and explored through the use of different media. Students are required to use their laptops for their monthly art criticism exercises. Students are expected to research quotes and historic illuminations on their computers.

Art III (3 credits)

(Prerequisite: Art II)

Art III builds upon Art I and II and provides a continuing exploration of the design, painting, sculpture, drawing, and printmaking processes. Students are required to use their laptops for their monthly art criticism exercises and when referencing imagery for projects.

Advanced Studio Art Honors I (3 credits)

(Prerequisite: Art I and Art II and departmental approval)

This course is for those students who show an exceptionally strong artistic ability or interest in the art field. It provides an opportunity for students to develop their artistic skills independently of the group, with the guidance of the instructor. Advanced art students, as well as seniors, have the opportunity to explore basketry and the creation of silver jewelry. Students are required to use their laptops for their monthly art criticism exercises and when referencing imagery for projects.

Advanced Studio Art Honors II (3 credits)

(Prerequisite: Advanced Studio Art I)

This course is a continuation of the creative, investigative process begun in Advanced Studio Art Honors I. Students can focus on portfolio preparation if needed for the college admission process.

AP Art I (Juniors 3 credits) & **AP Art II** (Seniors 3 credits)

(Prerequisite: Successful completion of at least 1 year of Art or Sculpture at The Wardlaw+Hartridge School. Students must have a GPA of 85 or a B average in all subjects and departmental approval. Students that demonstrate creative and technical aptitude in visual art can apply for the AP Art program. To do so they must submit 5-7 original works

of art by the end of the third week in August accompanied with a written element describing their process as related to their sustained investigation.)

This course requires a two-year commitment on the part of the student and the submission of an AP Portfolio. AP Art is intended for highly motivated Juniors and Seniors who have a serious interest in art and have developed strong foundational art skills. The Program emphasizes the process of creating art involving research, practice, experimentation and revision. Instead of an AP exam, at the completion of the second year, students will submit a portfolio of 15 original works of art to the College Board for evaluation .

If you are interested in being considered for this rigorous two year course, students should speak with their art teacher or the visual arts department chair for more information and guidance.

Performing Arts

Concert Band (1.5 credits)

(Prerequisite: Previous band instrumental experience and director approval.)

Any student in grades 9-12 with previous band instrumental experience may become a member of Concert Band. Emphasis is placed on learning and performing repertoire representing a wide range of musical styles. Students will work on instrumental techniques specific to their instrument as well as working collaboratively in a safe learning environment. Concert Band meets twice per week to prepare for the school concerts and other special events. Students enrolled in Concert Band are eligible to audition for Jazz Band. Students interested in more individualized instrumental instruction are encouraged to take private instrumental lessons.

Concert Choir (1.5 credits)

(Previous experience singing in choir is preferred, but not necessary. Must be able to match pitch.)

Any student in grades 9-12 may become a member of Concert Choir. Students will study and perform music from various styles of music, including choral repertoire in the classics, spirituals, musical theater, and contemporary genres. Each student is encouraged to perform to the best of their ability by learning basic vocal technique, learning to sing with appropriate stylistic expression, and learning how to read musical notation and symbols. Concert Choir meets twice per week to prepare for the school concerts and special events. Students enrolled in Concert Choir are eligible to audition for MadJazz. Students interested in more individualized vocal instruction are encouraged to take private voice lessons.

Fundamentals of Music (3 credits)

(Prerequisite: None)

This course is designed for students who wish to gain a basic knowledge of music theory. Students are encouraged to apply the knowledge learned in this course to the music they are currently studying and performing in their ensembles and private lessons. Music notation, intervals, triads, seventh chords, scales, key signatures, modes, rhythms, and transposition will be studied. Students will learn how to take music dictation, gain basic sight-reading skills, and create short compositions among other musicianship skills.

AP Music Theory (3 credits)

(Prerequisite: 93 in Fundamentals of Music and departmental approval.)

Advanced Placement Music Theory is for those students who might be considering music as a major or minor in college. This course is designed to develop more advanced writing and listening skills, including a review of intervals, chords, scales, modes, and key signatures. New clefs, advanced rhythmic and pitch notation, transposition, four-part harmony, analysis of musical forms, melodic and harmonic dictation, sight singing, and 18th century counterpoint are studied. Students are required to sit for the AP Exam in May.

Honors Designations

Jazz Band (1.5 additional credits)

Successful audition results in Honors designation for Concert Band.
(Co-requisite: 93 or higher in Concert Band)

Jazz Band is an auditioned ensemble available only to enrolled Concert Band students who remain in good standing, with the exception of certain instrumentation being made at the director's discretion. Students in Jazz Band will perform various genres of contemporary and jazz repertoire. Additional objectives include reading jazz music notation, jazz music theory and improvisation. Jazz Band meets twice per week. Students in the Jazz Band will play for the winter and spring concerts and potentially the Cookin' Cabaret in May. As members of the Jazz Band, students may also perform concerts for community organizations.

MadJazz (1.5 additional credit)

Successful audition results in Honors designation for Concert Choir.
(Co-requisite: 93 or higher in Concert Choir)

MadJazz is an auditioned ensemble available only to enrolled Concert Choir students who remain in good standing. Students in MadJazz will perform music from Renaissance madrigals and motets to modern jazz. MadJazz meets twice per week. Students in MadJazz will sing for the winter and spring concerts, potentially the Spring Music Recital, and at the Cookin' Cabaret in May. As members of MadJazz, students may also perform concerts for community organizations.

Introduction to Film (3 credits)

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Motion pictures have been an important part of society since its inception in the late 1800's. Over the last century, it has grown into one of the most popular art forms. Beyond entertainment, video also serves as an important tool for observation and research, anthropology, politics, and everyday life. Most of us spend a great deal of time absorbing information from the screen, yet very few of us are actually "film literate". Introduction to Videography seeks to develop film literacy through a combination of exercises, projects, homework assignments, essays, tests, quizzes, and screenings. By the end of this course, students will have a better understanding of how to create, absorb, and discuss motion pictures in a way that allows them to think critically and carefully about a subject they spend multiple hours of the day consuming.

Technical Film Production (3 credit)

As a method of storytelling, filmmaking is an artform and a craft independent from any other mode of expression. It is a multidisciplinary, multi-step process that requires a broad range of skills and abilities. In an attempt to prepare students for a well-rounded education in performing arts, we will be providing a one year, intensive training class, that will thoroughly prepare every aspect of film production. Trimester 1 will focus on camera work, Trimester 2 will focus on lighting, and Trimester 3 will focus on sound recording. Course work will be focused primarily on film exercises over making complete movies, in order to develop as many technical skills as possible.

Health & Physical Education, Grades 9-12

Health and Physical Education is required of all students, as part of W+H and the state of NJ requirements for graduation from Upper School. The physical education requirement is met each trimester through attendance and participation in scheduled physical education classes or by participation on a seasonal school athletic team.

Students may be excused from this requirement or parts of this requirement due to a medical reason. The medical excuse from the doctor specifying the duration (i.e. permanent, season, week, etc.) must be turned in to the school nurse, physical education teacher and Upper School office.

Grade 10 Health and Wellness (3 credits)

*Required Class

Grade 10 Health and Wellness prepares students to navigate and take ownership of their own health and wellness for life. Throughout the course, students will focus on holistic health practices, literacy, advocacy, relationships, communication, decision making and utilizing relatable up to date health information. Students will develop knowledge, concepts, habits and behaviors that affect health, wellness and one's quality of life. Course content is designed to be relatable and relevant with today's fast-paced changing world and

advances in technology. The curriculum includes topics such as healthy relationships, drugs and medicine, nutrition, fitness, reproductive health, sexuality, sleep hygiene, mental health, digital safety, disease prevention and accessing care. Community health and safety skills include First Aid & CPR/AED Certification. Students will analyze global health concerns and the impact that environment, career, financial and social-emotional stress has on overall wellness. This course prepares students to become critical thinkers, problem solvers, advocates, self-regulated, healthy, active members of their families and communities. Maintaining personal health is a skill and requires practice, daily habits, self-reflection and a foundation of knowledge.

Grade 11 Health and Life Skills (Trimester 1/ 1 Credit)

*Required Class

Grade 11 Health and Life Skills continues to build on the comprehensive health education model by further addressing relationships, drugs and medicine, digital safety, nutrition, sleep hygiene, personal health/fitness, mental/emotional health, global health concerns, health promotion and disease prevention. Through participation in a variety of instructional activities, students enhance communication, problem-solving, and critical thinking skills. Current health issues such as cancer-prevention education, lifestyle diseases and advocacy for self and others will be emphasized during this course. Student knowledge and skills are used to critically analyze the effects of personal decisions on growth and development and to engage in positive behaviors, to foster and maintain a healthy lifestyle.

Physical Education (1 credit)

The goal of this course is to develop an appreciation for the positive benefits of physical activity and to stimulate interest in lifetime activities. This is accomplished through the offering of a broad range of activities along with an emphasis on individual development.

Students enrolled in Physical Education classes meet twice per week. Successful completion of the physical education program is a graduation requirement for students who do not participate in a W+H sport during an athletic season. PE credit is awarded to students who successfully attend, participate and adhere to the PE uniform policy. Participation in outside sports does not qualify for PE credit.

Athletics

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At Wardlaw+Hartridge, we consider athletics an extension of the classroom and believe it is integral to the educational experience of our students. We strive to provide an environment that promotes achievement, fair play, integrity, sportsmanship, and overall health and fitness.

Students may choose from the following sports: in the fall – boys' soccer, girls' soccer, girls' tennis, girls' volleyball or coed cross country; in the winter – boys' basketball, girls' basketball, coed cheerleading, coed swimming, or coed winter track and field; in the spring – boys' tennis, boys' lacrosse, girls' softball, coed golf, or coed track and field.

Students/parents are responsible for completion of all athletic forms required. Team members will be issued a uniform at the beginning of the season. Students that successfully attend pre-season and season practices, participate at home and away games and return their issued uniform, clean and in good condition, to the Athletic Department/Coach will receive credit towards the Physical Education W+H and state requirement for graduation and be allowed to participate in another season sport.

At times, students may have the opportunity to assist seasonal sport teams, as a volunteer statistician or scoreboard keeper. This participation does not count towards the Physical Education requirement.

Additional Requirements

College Counseling Seminar

The College Counseling Seminar is a year-long Pass/Fail class which begins in the second trimester of junior year and concludes at the end of the first trimester of senior year.

The Wardlaw+Hartridge mission of preparing students "to lead and succeed in a world of global interconnection" is certainly true in the College Counseling program, as students begin to gaze beyond the Wardlaw+Hartridge campus and enter into a time of exciting transition. Students, with the collaboration and support of their parents and College Counselor, embark on a journey of self-discovery as they engage in honest self-assessment, thoughtful research, and increasingly independent decisions. We encourage students to find their voices while they explore, probe, and challenge their own assumptions about themselves and the colleges they are considering. To find comfortable and appropriate matches between students and post-secondary institutions, we attempt to foster among the students, parents, and the College Counselor open lines of communication, honest feedback, and a spirit of cooperation. We try to nourish an environment in which all may practice patience, sustain their sense of humor, and maintain an open mind as we navigate together the challenges and the exciting possibilities in the college selection process.

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We adhere to the belief that students are ultimately the driving force behind the process. We encourage students to take ownership of their destiny and responsibility for their actions; we support them in embracing this opportunity to test their values, explore their personal preferences, and make complex, long-term decisions for themselves. Application deadlines, testing dates, essays, recommendation requests, and interviews all require equal and full attention from the students. We hope that the students emerge from this critical stage in their adolescent development and their first step toward adulthood with a clearer sense of their independence.

The College Counseling Office operates within the context of truth and reality, placing the dignity and worth of each student as a primary focus. Through active listening, an accurate assessment of students' abilities and talents, and a willingness to understand students' personal and cultural sensitivities, we strive to build a healthy and open relationship with students and their parents. We value students for the whole spectrum of their humanity and promise. We are confident that their preparation, organizational skills, maturity, intelligence, and thoughtfulness will ensure satisfaction with their college selection.

Senior Speeches

Every senior is required to plan and deliver a three-to-five-minute speech on a topic of importance to the student. Working with a faculty advisor, each student receives individual assistance with topic selection and organization of material, as well as coaching in the delivery of the speech. These speeches are given during Morning Meeting throughout the year on dates selected in advance by the students. Family and friends are welcome to come and hear these speeches.

Community Service

Students who engage in community service opportunities develop civic engagement, learn practical skills, have a greater sense of responsibility and a connection to their community, whether it be at school or their local community.

For those reasons, a minimum of 20 hrs of community service is required by each student each year per grade. Students enrolled in the Global Scholars program are required to complete an additional 20 hrs their junior and senior, for a total of 40 hours of community service each year.

Student community service hours will be recorded and approved by the upper school.

Additional Programs

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Peer Leadership

Pre-Requisites:

- Cannot be on social watch.
- No major disciplinary issues in 11th grade.
- Must maintain good academic standing.
- Must have a good attendance record and follow guidelines set forth in the US Student Handbook, such as dress code and behavioral expectations.

The Peer Leadership Program at the Wardlaw+Hartridge School has a long-standing tradition of helping 9th grade students become integrated into their new environment in the Upper School community, while simultaneously developing and testing the leadership skills of the selected senior peer leaders. Peer leaders are chosen based upon their demonstrated ability to lead a group and their commitment to respect, confidentiality, responsibility, and trust, as well as emotional intelligence. Together with their advisors, the senior peer leaders practice communication skills, develop a greater appreciation for individual differences, and learn problem-solving skills that they can apply to other life situations. This process begins with a three-day retreat in August and continues in weekly meetings throughout the school year. Ninth graders meet regularly in small groups, with their assigned senior peer leaders. They examine such topics as peer pressure, relationships, academic concerns and other common issues facing Wardlaw+Hartridge students. The program provides the 9th grade groups with the tools necessary to build essential relationships and to make critical decisions. It aids in breaking down barriers and increasing communication and understanding across social groups. Peer Leadership facilitates the building of the caring and safe learning community of the Upper School, creating a healthy social climate for students to discuss issues pertinent to their lives.

Global Online Academy Courses (GOA)

Through participation with Global Online Academy (GOA), we are able to offer a variety of interactive online courses. Students should be prepared to devote an average of 6-8 hours a week for a GOA course. This includes weekly assignments, group projects, assessment, class time and check-ins with the course instructor. GOA runs on a semester system, with courses offered in the Fall and Spring. Registration for courses approved by W+H will be made available in June for Fall 2026 and November for Spring 2027. All students that make a request will be notified as to whether or not their request was granted. Students will receive a final grade report from GOA at the end of their respective semester. The grade and credits will appear on their W+H transcript. Students registered for but who request to drop a GOA course past the drop period designated by GOA will receive a “W” on their transcript and are subject to a cancellation charge.

Library & Information Center

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The Sonawalla Center for Global Learning (CGL) is available to Upper School students. Space in the Center for Global Learning is for students to do collaborative work and also includes quiet study rooms for individual work. Smart board, Smart TV and Skyping capabilities are available in the larger conference/classroom space. Smart board, Smart TV and Skyping capabilities are available in the larger conference/classroom space. Research and investigative skills are strengthened as the student progresses through the Upper School. The use of information gleaned from a variety of the Center's resources is stressed for students to complete assignments designed to meet specific curricular needs.

Summer School

Students may choose to take courses during the summer months. Summer study opportunities are available at Wardlaw+Hartridge and exist at many other institutions. These programs are offered for both enrichment and acceleration. It is the obligation of the student to have his or her summer transcript sent to the Wardlaw+Hartridge Upper School Office in order to have a complete transcript on file for college applications.

Prior to the first Monday in June, a student who is interested in taking courses in the summer for the purpose of advancement, whether at Wardlaw+Hartridge or elsewhere, must complete a form that requires permission from the department chairperson and the Head of the Upper School. An example would be a student who has completed Geometry and wishes to take Algebra II (or vice-versa) in summer school in order to enroll in Pre-Calculus in the fall. Forms are available from the Department Chair or Registrar.

Policies & Procedures

Course Changes

During the first two weeks of Trimester 1, students may request to add or drop a course by contacting the Registrar in writing by the specified add/drop deadline. Adding a course is subject to availability and dropping a course is dependent on whether or not the course is a requirement for graduation. A student may add or drop a course only by obtaining approval from the Registrar and Head of Upper School. In the case of seniors, the College Counseling Office must also approve the change. Students registered for but who request to drop a GOA course past the drop period designated by GOA will receive a "W" on their transcript and are subject to a cancellation charge.

Any course that is dropped after the add/drop period will remain on the student's transcript with a "W" to indicate that the student withdrew from the course.

In the exceptional case that a senior is granted permission to drop a course, they will need to immediately notify any/all colleges to which they have applied or been accepted of the change. The College Counseling Office will guide the student through completing this process and explaining the reason for the course change.

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Credits from Other Institutions

Credit for courses from other accredited institutions in courses comparable to our own are accepted toward the subject credit requirements for graduation, ***when it is necessary*** for a student who has not received a passing grade in a required course to take the course over the summer. The course must be approved in advance by both the Upper School and College Counseling offices. Transcripts of these credits must be placed on file with both the Upper School Office and the College Counseling Office for reference and to be used on college applications. Grades from other institutions are not factored into a student's GPA on their Wardlaw+Hartridge transcript, but credit hours are counted towards graduation requirements.*

If a student wishes to advance to successive levels of a subject by taking summer courses or college courses during the school year, the student must get *prior approval* from the subject Department Chair as well as the Head of Upper School and may be required to show competence in the subject. Please refer to the Mathematics Courses section of this guide for further instructions.

**Students who fail a required course for graduation will be required to attend summer school to make up the credit. Should the student successfully pass the remedial course, both the grade and credit hours will be noted on their transcript, but not factored into their GPA.*

Grade Point Average

A student's GPA is based on the grades obtained in his or her major academic courses. Grades are assigned numerically as percentages, not by letters. For reference, letter grade equivalents are as follows:

- 90 to 100 = A
- 80 to 89 = B
- 70 to 79 = C
- 60 to 69 = D
- Below 60 = F

A student's cumulative weighted GPA is calculated by first factoring in the rigor of their curriculum.

If the course is an Honors course or an AP course, the numerical grade is multiplied by a

weighting factor (.025 for Honors and .05 for AP and Advanced Study). The grade point average also takes into account the credit value of each course. All Wardlaw+Hartridge transcripts provide students with both their cumulative weighted and unweighted GPAs, which are also reported to colleges.

Independent Study

In extenuating circumstances, an Independent Study may be available to upper classmen, if a required course is unavailable. Students and supervising teachers must complete the required form by the drop/add date. If a schedule conflict creates a need for independent study, the Department Chair and Upper School Head will consider the request. Grades for independent study are given regular weight in the computation of the student's grade point average.

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